

news letter

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No. 12

GENERAL ADMINISTRATION

Dr. W. W. Skinner and Mr. Henry A. Donovan appeared before the House Committee on Appropriations on May 28 in connection with a request for \$10,000 for equipment to complete the U. S. Fruit and Vegetable Products Laboratory at Weslaco, Texas.

Mr. Donovan made an inspection of the business activities of the temporary office of the Eastern Regional Research Laboratory at Philadelphia, June 4. In addition to his conferences with George P. Wolf at the temporary offices, he also had opportunity to inspect the administrative office arrangements at the new building which is being erected for the Eastern Regional Research Laboratory at Wyndmoor, near Philadelphia.

During the week of May 20, the conference of Business Managers of the Regional Research Laboratories, called by Mr. Donovan, was held at Washington. Those attending were: Mr. Aanestad, Business Manager, Western Laboratory, Miss Mohagen, Acting Business Manager, Northern Laboratory; Mr. Smith, Business Manager, Southern Laboratory; and Mr. Wolf, Business Manager, Eastern Laboratory. The purposes of the meeting were to review, discuss, and develop new, uniform procedures and practices in connection with the business administration activities. The various business functions were reviewed and discussed and tentative plans agreed upon for the coming year.

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During the latter part of May Mr. S. H. McCrory visited the cooperative electrification research at the School of Living, Suffern, New Jersey. On June 15 he left for Winnipeg and Brandon, Manitoba, Canada; Minot, North Dakota; Estevan and Regina, Saskatchewan, Canada; to be present at public hearings in connection with the regulation and apportionment of the waters of the Souris River and its tributaries.

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REGIONAL RESEARCH LABORATORIES

H. T. Herrick and T. L. Swenson returned recently from a trip to the West Coast, where a conference was held with State Experiment Station Directors relative to the program of work of the Western Regional Research Laboratory. While in the West conferences also were held with representatives of the cold storage industry and with research workers with reference to work to be done at the Western laboratory on poultry products, fruits, and vegetables.

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H. C. Diehl, who has been in charge of the Frozen Pack Laboratory at Seattle, Wash., has been appointed Chief of the Commodity Processing Division of the Western laboratory. As Chief of the Division Mr. Diehl will continue to direct the research work with which he has long been identified in the Pacific Northwest, as well as the freezing preservation work carried on in the Seattle laboratory.

Mr. Diehl, a native of Bridgeport, Conn., and a graduate of Michigan State College, has been on the scientific staff of the Department of Agriculture for twenty years. He was in the Chemical Warfare Service during the World War. He has carried on research in the handling, storage, and transportation of fruits and vegetables and, in recent years, has given most of his attention to problems in connection with preservation of these farm products by freezing. His discoveries have had important effects on commercial practices in this field in the Northwest and in other parts of the country. He is the author of many scientific papers bearing on the fresh fruit and vegetable industries.

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W. B. Van Arsdel has been appointed Chief of the Engineering and Development Division of the Western laboratory. Mr. Van Arsdel will head the engineering development of processes worked out in the laboratory and the study of industrial opportunities for expanding outlets for farm products.

A native of Indiana, Mr. Van Arsdel received his degree in chemical engineering from Purdue University. In 1913 and 1914 he was research associate at the Massachusetts Institute of Technology. He was engaged in research and development work for a manufacturing firm from August, 1914, until his appointment in February, 1937, to head the Engineering Section of the U. S. Regional Soybean Laboratory at Urbana, Illinois. In 1938 he was detailed to assist in the technologic planning of the Department's four regional research laboratories.

Mr. Van Arsdel is the author of many scientific papers; is co-author of the chapter on "Pulp and Paper" in Silver Anniversary Volume of the American Institute of Chemical Engineers; and has been granted 32 United States and Canadian patents representing various lines of research. During the World War he supervised a plant for the production of raw materials for mustard gas.

He is a member of the American Institute of Chemical Engineers, the American Optical Society, and the American Chemical Society.

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Dr. G. E. Hilbert has been transferred to the Northern Regional Research Laboratory at Peoria, Ill., where he will be Chief of the Starch and Dextrose Division. Dr. Hilbert will direct research work relating to a fundamental study of starch, dextrins, and dextrose to serve as a basis for developing new and improved industrial uses for these materials.

Dr. Hilbert, a native of Connecticut, received the degree of Chemical Engineer from Rensselaer Polytechnic Institute; was Research Fellow and received the degree of MS at Lafayette College; and was Research Assistant and received the degree of PhD in Chemistry from Yale University, after which for two years he continued research work there in organic chemistry and biochemistry. In June, 1930, he entered the service of the Bureau of Chemistry and Soils, where he engaged in organic chemical research in the Fertilizer Research Division on chlorophyll and chlorophyll derivatives and synthesis of various chemical compounds of interest in the fixation of nitrogen. In 1937 he was placed in charge of the Organic Section of the Division directing work on fixation of nitrogen through organic compounds. In August, 1938, he was transferred to the office of Regional Research Laboratories as scientific adviser. Dr. Hilbert is author and co-author of some twenty-five publications.

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The subject "Northern Regional Laboratory for Research on Utilization of Farm Products" was presented by J. H. Shollenberger before a meeting of Community Farmers at Bradford, Ill. on May 2, and by Dr. C. E. Lothrop before a meeting of the Illinois Grain Dealers Association on May 6. Dr. L. B. Howard is presenting this subject at a meeting of the Kewanee, Ill. Rotary Club on June 18.

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R. H. Nagel gave a talk on the subject "Research on the Utilization of Western Agricultural Products," before the Regional Committee of the State Chamber of Commerce, Agricultural Division, at Sacramento, Calif. on May 10, and before the Agricultural Department of the State Chamber of Commerce, Los Angeles, Calif., on May 23. He also addressed a meeting of the Golden Gate Paint, Varnish and Lacquer Association in San Francisco on the same subject on June 21.

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A paper by E. A. Gastrock and K. S. Markley, entitled "The Cottonseed Industry and the Southern Regional Laboratory," was presented before a meeting of the National Oil Mill Superintendents Association at San Antonio, Texas, May 29-31.

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R. J. Cheatham presented a paper entitled "Research Program on Cotton Utilization in the Southern Regional Research Laboratory," before the Southern Textile Association at Blowing Rock, N.C. on June 7.

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J. H. Shollenberger gave a talk on "Processing of Wheat and Corn" before the American Society of Agricultural Engineers at State College, Pennsylvania, on June 18.

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INDUSTRIAL FARM PRODUCTS RESEARCH

U.S. Regional Soybean Industrial Products Laboratory:

T. H. Hopper, Senior Chemist presented the "Report of the Soybean Analysis Committee" by R. T. Milner, Chairman of the Committee, at the spring meeting of the American Oil Chemists' Society at New Orleans on May 9-10.

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Among those attending the meeting of the American Institute of Chemical Engineers at Buffalo, N.Y., on May 13-15, was W. H. Goss, Chemical Engineer at the Laboratory.

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Director R. T. Milner, attended the meeting of the Missouri Farm Chemurgic Commission at Sedalia, Mo., on May 15. He spoke on "What the Regional Laboratory is Finding Out about Soybeans."

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A paper "The Effect of Formaldehyde on the Isoelectric Points of Some Proteins by Microelectrophoresis," by S. J. Circle and A. K. Smith, was presented by Doctor Smith before the symposium on the Colloidal Behavior of Proteins at the Seventeenth National Colloid Symposium at Ann Arbor, Mich. June 6-8. Mr. Circle also attended the meeting.

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RURAL ELECTRIFICATION RESEARCH

Harry L. Garver visited the University of Georgia, Athens, Ga., May 20 and 21, where he conferred with Prof. R. H. Driftmier, and J. B. Greiner on cooperative rural electrification research projects. On May 22 and 23 he visited the Farm Security Resettlement Project at Irwinville, Ga., where he conferred with O.A. Brown, Associate Engineer, on cooperative research work being carried on at that point.

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On May 31 and June 1, Mr. Garver visited the University of Nebraska, Lincoln, Neb. to discuss the cooperative rural electrification research projects being carried on under Agents F. D. Yung and J. E. Murray. On his return trip he stopped at Auburn, Ind., to confer with Truman E. Henton, of Purdue University, who is working on a corn borer control project.

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CARBOHYDRATE RESEARCH

E. K. Ventre and C. A. Fort attended the meeting of the Farmers and Manufacturers Beet Sugar Association at Detroit, Mich., June 21-22, and conducted a discussion of the data and conclusions in the Division's 1940 report of cooperative work with the beet sugar industry, recently prepared for distribution to the industry. The meeting was attended by factory operating personnel from the Eastern group of beet sugar factories (Michigan, Ohio, Indiana, Illinois and Wisconsin). For several years the discussion of the Division's annual report of cooperative work has been a feature of these annual meetings.

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It has been learned that there has been developed recently in Germany a process (termed the "Maus Process") which is similar to the grinding, pressing (with addition of a small proportion of chemical), and drying process developed by this Division for the purpose of dehydrating sweetpotatoes for storage. The object of these processes is to make this crop available the year-around as raw material for starch and sweetpotato flour manufacture and as a feed material to replace corn as a carbohydrate constituent for balancing Southern feeds such as cottonseed meal, peanut meal, etc. It is understood that the equipment for operating the "Maus Process" has been developed along two lines - a stationary machine and a portable machine. The latter may be taken direct to the potato fields and used for converting potatoes into dehydrated form on the spot. Farm roughage is used for absorbing the expressed juice so that it can be salvaged for feeding purposes. Hence, nothing is wasted. It is a matter of some interest in connection with the war in Europe that the "Maus Process" is evidently to be used in Germany for conversion of white potatoes into stable form for keeping as a measure of food and feed conservation.

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Several concerns connected with the paper industry, including the Paper Makers Division of the Hercules Powder Company, have expressed interest in the possibility of using the residual by-product pulp from the manufacture of sweetpotato starch in the sizing of paper. Possibility of such use is based on the presence of a considerable percentage of starch and of hemicelluloses, including pectin, which might also be useful for this purpose. Further tests are being arranged, and some hand sheets in which an extract of the pulp was used have been produced in the experimental paper mill at the Bureau of Standards. The Bureau of Standards had previously published the results of an investigation of the use of sweetpotato starch as paper size (Miscellaneous Publication M150, "Suitability of Sweet Potato Starch for the Beater Sizing of Paper").

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United States Public Service Patents 2,185,414, "Process of Treating Oils", and 2,202,678, "Low Viscosity Starch Adhesives and Methods of Preparing the Same", have been issued, respectively, to R. S. McKinney of the Gainesville (Fla.) Tung Oil Laboratory, and to Kyle Ward, Jr., who formerly held a Chemical Foundation fellowship in this Division.

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H. S. Paine attended a conference, June 7, in Atlanta, Ga., of representatives of the Georgia Experiment Station, Coastal Plain Experiment Station and the Alabama Experiment Station, called for the purpose of arranging a program of feeding experiments for next season in which the relative values of dehydrated sweetpotatoes (sweetpotato meal), sweetpotato pulp (by-product from starch manufacture) and corn will be studied. The Georgia Experiment Station was represented by Mr. Z. A. Massey, the Coastal Plain Experiment Station by B. L. Southwell and the Alabama Experiment Station by J. C. Grimes. Paul E. Howe, Chief, Animal Nutrition Division, and Assistant Chief, Bureau of Animal Industry, was also present and participated in the discussion.

Sixty tons of sweetpotato meal (to be furnished by the dehydration pilot plant, Laurel, Miss.) will be required for these tests, including feeding tests to be made by the West Tennessee Experiment Station. Feeding tests will be conducted with beef cattle, dairy cattle, mules, sheep and hogs.

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In view of the European war situation and its possible effect on Java and the Dutch East Indies, from which the United States obtains most of its supply of cassava starch, consumers of this starch have been considering use of substitute starches. One of the largest manufacturers of adhesives in the United States, which is an important consumer of cassava starch, recently made a proposal to purchase the entire 1940 output of the Laurel, Miss., sweetpotato starch factory. This concern had previously made extensive tests with sweetpotato starch and had found it superior in several respects to cassava starch for the manufacture of adhesives.

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H. S. Paine visited the Tung Oil Laboratory at Gainesville, Fla. the first part of June and on the return to Washington stopped at Savannah, Ga., June 11, where he discussed with J. F. Jackson, General Agricultural Agent, Central of Georgia Railway, plans for erection of a commercial dehydration plant for production of sweetpotato meal for cattle feeding. He also made a brief talk before the Savannah Rotary Club regarding the sweetpotato utilization research. At their request, the progress made in the research program for manufacture of sweetpotato starch and sweetpotato flour and for dehydration of sweetpotatoes for use as cattle feed, was discussed later in considerable detail with William Murphy, Vice-Chairman of the Board of Directors, and Lane Young, President, Citizens and Southern National Bank, Savannah, Ga.

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The Continental Gin Company, Birmingham, Ala., is planning to diversify its production in view of the cotton market situation. Their Research Department is developing a farm dryer for drying of farm crops, principally forage crops. Cooperation is being maintained with this development and a supply of pressed, ground sweetpotatoes from the Laurel, Miss., dehydration plant is being furnished to the research department of the company with the idea of adapting their dryer to the dehydration (after pressing) of sweetpotatoes for use as feed and as raw material for year-around operation of sweetpotato starch factories.

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When he was in Savannah June 11, Dr. Paine discussed the sweetpotato utilization research program with Dr. H. G. Ukkelberg, who is in charge of research at Henry Ford's Richmond Hill Plantation, Ways, Ga., near Savannah. Dr. Ukkelberg advised that Mr. Ford is interested in the work done by the Division on utilization of sweetpotatoes and had asked him to conduct experiments at the Richmond Hill Plantation, which might be helpful in promoting this program. As a result of this discussion, Dr. Ukkelberg is planning to undertake certain phases of research concerned with reduction of production costs of sweetpotatoes on a tonnage basis and utilization of certain farm by-products, such as sweetpotato vines, as hay or silage.

PROCESSING FARM PRODUCTS RESEARCH

Cotton Ginning Investigations:

The annual ginning conventions of Georgia, Mississippi, Oklahoma, Arkansas and Tennessee were participated in by Chas. A. Bennett of this Bureau and F. L. Gerdes of the Agricultural Marketing Service on behalf of the Cotton Ginning Laboratory. On May 29 a large delegation of cotton ginners headed by District Agent C. C. Smith of Greenwood, Miss. conducted an all-day program at the U. S. Cotton Ginning Laboratory in the interest of better ginning in the Mississippi Valley. John Pettey and associates in the oil mill industry provided a barbecue for the entire attendance. The District Agent conducted a cotton ginning Forum in which Messrs Bennett and Gerdes answered questions asked by the visiting ginners. Groups comprising about 25 each were conducted through the Laboratory by members of the staff.

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On May 22 60 members of a good will tour from Jackson, Miss. Chamber of Commerce visited the Laboratory in a bus caravan and were conducted through the Laboratory by the joint staff of the Bureau of Agricultural Chemistry and Engineering and the Agricultural Marketing Service.

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On June 1 Dr. Waldo H. Kliever, who has been developing valuable scientific instruments for the Laboratory under a temporary appointment, accepted a position in Minneapolis, Minn. with a private concern known nationally for its work in research and development of new instruments. The entire staff of the Laboratory have extended their best wishes to Dr. Kliever.

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Mechanical equipment for the coming season is being rapidly warped into place. Latest models of cotton gins have been received from most of the manufacturers, and others are on the way.

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Major D. W. Blake of Blakely, Miss., owner of one of the largest cotton plantations in the deep South, has made available to the Bureau an interesting steam engine which is approximately 100 years old, together with one of the oldest metal screw cotton presses in existence. Both of these units have been loaned by the Blakely Plantations for display purposes at the Laboratory along with a corn sheller and grit mill of about the same age.

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On June 8 a contingent of Texas A & M College students conducted by Prof. Easley, visited the Laboratory and Mississippi Delta Branch Experiment Station. This visit was the annual tour of the Texas Agronomy students who in peace times have visited the principal cotton reserve centers of Europe, but are this year confining their trip to American centers.

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Cotton Packaging

The foundation for the standard-density, Bankhead-Jones cotton press is now being poured in the pressing laboratory, and a large amount of millwright work, machinery relocation and general experimental construction in the project are being undertaken.

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A new cotton-packing or tramping device has been made up by the staff which will be used in experimental tests and studies. Studies are being conducted upon data accumulated in the pressing of 2,500 bales of cotton at compresses in Louisiana, Tennessee, Mississippi, and west Texas.

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Preliminary indications on fiber and spinning appraisal as made by the Agricultural Marketing Service in connection with the work have shown to the Laboratory that the high pressures of compression do not appear to be the elements which damage the spinning value of the fibers although certain types of high density bales were adversely affected by certain mechanical actions in the equipment.

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FARM MECHANICAL EQUIPMENT RESEARCH

R. B. Gray left Washington for Chicago and other points, June 10, to confer with machinery manufacturers on some of the more recent developments in farm machinery. Crop residue machinery was discussed with Dr. Iothrop and others at the Northern Regional Research Laboratory at Peoria, Ill., June 13 and 14. Later Mr. Gray conferred with Mr. Irons on the pest and plant disease control project at Toledo, Ohio. Mr. Gray attended the American Society of Agricultural Engineers' meeting at State College, Pa., on June 17-19 before returning to Washington.

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G. A. Cumings left Washington June 7 on a western trip to confer with various members of experiment stations and agricultural colleges regarding fertilizer-distributing machinery requirements and developments. His itinerary included Utah, Idaho, Montana, Washington, Oregon, California, Arizona, and New Mexico. On his return East Mr. Cumings inspected some of the fertilizer placement experiments in Michigan, Ohio and New York.

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Fertilizer placement experiments have been conducted by W. H. Redit, at different points. In the early part of June tomato and sweetpotato experiments were started on the Eastern Shore. Later, work was conducted with tobacco in Pennsylvania, tomatoes in Virginia, and cabbage in New York.

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D. B. Eldredge left the early part of the month for Michigan in connection with fertilizer placement studies with beans. On his return to Washington he assisted Mr. Redit in other related field work.

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W. R. Humphries spent part of June in New Jersey in connection with studies of power requirements in putting up grass silage.

E. M. Mervine left Fort Collins, Colo., June 7, to confer with machinery manufacturers at Fremont, Nebr., Columbus, Ohio, and also with members of the State Experiment Station at Columbus, Ohio, and growers and processors at Chatham, Canada. He also visited machinery manufacturers at Detroit and Chicago, and members of the Iowa State Experiment Station at Ames, and Iowa Experiment Farm Substation at Kanawa, Iowa, relative to sugar beet experimental plots. Mr. Mervine attended the meeting of the American Society of Agricultural Engineers at State College, Pennsylvania, June 17-20.

On June 10 R. M. Merrill left Auburn, Ala., to confer with manufacturers at Louisville, Ky., Cincinnati, Columbus, Toledo, and Cleveland, Ohio, and Detroit, Mich., concerning work of the Tillage Machinery Laboratory. He also conferred with E. A. Silver at Columbus on work of the research committee of the American Society of Agricultural Engineers.

Frank Irons left Toledo, Ohio, June 16, to investigate equipment used for mixing and distributing grasshopper bait in some of the Western States. The information obtained is for the further development and improvement of such equipment. His investigation covers the States of Minnesota, Iowa, North Dakota, South Dakota, Nebraska, Kansas, Montana, Wyoming, Colorado, New Mexico, and Texas.

The Advisory Committee of the U. S. Beet Sugar Association, members of the California Agricultural Experiment Station staff and E. M. Mervine and S. W. McBirney of this Bureau met at Davis, Calif. on June 3 and 4 for the fifth semiannual conference to discuss the progress on the sugar beet machinery project. Reports were made on the different machines and phases of the work under development and the program for the next six months was outlined and discussed.

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FOOD RESEARCH

The Tenth Annual Research Conference of Johns Hopkins University held at Rehoboth Beach, Del., on June 3-7, was attended by Dr. Harry E. Goresline and E. F. Jansen.

Dr. Walter S. Hale presented a paper entitled "The Effect of Storage on the Proteins of Wheat and Wheat Flour" at the meeting of the American Association of Cereal Chemists in New York, on May 20-25.

H. H. Hall left Washington on June 14, for an extended period of annual leave, during which time he will attend classes at the Michigan State College, East Lansing, Mich. He planned to attend a meeting of the Farmers' and Manufacturers' Beet Sugar Association at

Detroit, to be held on June 21-22.

A visitor to the Division on June 13 and 14 was Dr. Harold J. Loeffler, who is conducting research on fruit juices at the Los Angeles station of the Division under a Fellowship from the Glass Container Association. He discussed the work of the Fellowship with various members of the Division interested in fruit juice work.

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FARM STRUCTURES RESEARCH

Wallace Ashby, W. V. Hukill, M. A. R. Kelley, J. R. McCalmont, and W. R. Swanson attended the American Society of Agricultural Engineers meeting at Pennsylvania State College. Mr. Kelley gave a paper "Progress Report of Studies on Artificial Lighting of Dairy Stables," prepared by himself and A. V. Krewatch of the University of Maryland.

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PROTEIN AND NUTRITION RESEARCH

Dr. D. B. Jones attended the meeting of the American Association of Cereal Chemists, May 20-25, in New York City, and presented a paper entitled "The Effect of Storage on the Protein of Wheat, White Flour, and Whole Wheat Flour."

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DIVISION OF PLANS AND SERVICE

Messrs. Joseph A. Scott, Chief; Geo. T. Hemmeter, Head of the Mechanical Section, and H. A. Magnuson, Head of the Specification Section of the Division have recently completed an inspection tour of the Southern, Western, and Northern Regional Laboratories for Research on Utilization of Farm Products for the purpose of expediting construction progress, principally to settling as many outstanding and pertinent change order alterations as possible. As a result of this tour, the Bureau may expect a more rapid completion of these projects.

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The Eastern Regional Laboratory acceptance tests, with special reference to mechanical equipment, have been postponed approximately one week by the contractor. Nelson E. Carr went to the Laboratory on June 19 to make preliminary arrangements for the acceptance tests. A staff of engineer specialists will commence the testing of the steam generation, refrigeration, air conditioning, elevator, and electric equipment during the week of June 24.

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ALLERGEN INVESTIGATIONS

Dr. Harry S. Bernton and Dr. Henry H. Stevens attended the meeting of the American Medical Association at New York City, June 10, 11, and 12.

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E. J. Coulson received the degree of Doctor of Philosophy from the Georgetown University, Department of Biochemistry, on June 10.

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NAVAL STORES RESEARCH

C. F. Speh and Dr. S. Palkin went to Philadelphia on May 20, to discuss the design of a column still with engineers of F. J. Stokes Company.

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C. F. Speh, Dr. E. E. Fleck and W. D. Pohle, left Washington on June 2 for a trip through the Naval Stores producing area, and to visit the Naval Stores Station at Olustee, Fla. They visited naval stores producing plants in Savannah, Brunswick, Valdosta and Homerville, Ga., and in Jacksonville, Fla. They spent several days at the Naval Stores Station, discussing various phases of the work with members of the Station staff and returned to Washington on June 9.

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C. F. Speh and Dr. S. Palkin spent June 14 in New York City, conferring with Drs. Miller and Hickson of Columbia University, regarding a process of gum fractionation. They also visited the Foster-Wheeler Corporation to discuss design of apparatus with their engineers.

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CHEMICAL ENGINEERING RESEARCH

Dr. David J. Price spent June 6 at Wilmington, Dela. conferring with officials of the Dupont Company and Hercules Powder Company, also with members of the Eastern Fire Chiefs' Association relative to dust explosion and fire prevention matters.

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Hylton R. Brown went to Buffalo, N.Y. where, on June 4, he addressed the Association of Operative Millers on the subject "Dust Explosion Protection for Mills and Elevators." He used the Department's motion picture "Dangerous Dusts," in this connection. Mr. Brown discussed with the millers recent developments in dust-collecting equipment and grain-cleaning equipment designed to reduce the dust explosion hazard.

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Byron J. Culp attended a meeting of the Institute of the Society of Personnel Administration held at Washington May 25. Members of the Institute discussed methods for collecting and assembling information on accidents and illnesses among Government employees with a view to eliminating the causes of such illnesses and accidents.

Mr. Culp gave considerable time this month to classifying the Bureau's Laboratories as to type, use, occupancy, etc. This activity was carried on as the result of a request from Mr. Sette, Technical Assistant to the Secretary.

Richard L. Hanson visited the Western and Southern Regional Research Laboratories. En route to San Francisco he spent a day in Chicago investigating laboratory equipment. The period from May 25 to June 6 he spent in Berkeley, Calif., where he worked with the staff of Western Regional Laboratory in laying out space and planning equipment and necessary modifications. Mr. Campbell of the Frozen Pack Laboratory in Seattle joined Mr. Hanson at Berkeley for the purpose of planning the food processing unit of the Industrial Laboratory wing. Mr. Hanson conducted an investigation of vibration conditions in the laboratory wing, as well as means of dampening such vibrations.

In New Orleans, June 10 to 15, Mr. Hanson worked on plans for laboratory occupancy and equipment.

On May 31 bids were opened for the furnishing of the Northern, Eastern, and Western Regional Laboratories. The award was given to the Laboratory Furniture Company of Long Island City, N.Y., and the work of installing the furniture must be completed in 180 days.

This Division has been preparing specifications and reviewing bids for shop equipment for the Northern and Western Regional Laboratories.

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DEPARTMENT PUBLICATIONS ISSUED

Circular 544, "Methods of Ventilating Wheat in Farm Storages,"
By C. F. Kelly, Associate Agricultural Engineer,
Division of Farm Structures Research

Circular 540, "Cotton-Tillage Studies on Red Bay Sandy Loam,"
By John W. Randolph, Agricultural Engineer, I. F. Reed,
Associate Agricultural Engineer; and E. D. Gordon,
Associate Agricultural Engineer; Division of Farm
Mechanical Equipment Research.

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PUBLICATIONS APPEARING OUTSIDE THE DEPARTMENT

- Balls, A.K., Jansen, E.F., and Axelrod, B.A. Chemical study of the virus infectious myxomatosis. *Enzymologia* 8 (4): 267-72. April 15, 1940.
- Beavens, E.A. (With C. S. Pederson, N.Y. State Agr. Expt. Sta., senior author) Taking the guesswork out of pasteurizing. *Food Indus.* 12 (4): 61-63, April, 1940.
- Earle, F. R. and Milner, R.T. A crystallization method for the determination of saturated fatty acids in soybean oil. *Oil and Soap* 17(5): 106-108, May, 1940.
- Fessenden, G. R. Early summer flowers on Mt. Washington. *Mt. Washington Observatory News Bull.* No. 7, pp. 2-5, 7-8, June 1940.
- Heid, J. L., Fruits and Vegetables in the Rio Grande Valley. *The Canner* 90(18): 13-14, April 6, 1940.
- Leatherman, Martin. Plant Propagating Pots, U.S. Patent 2,202,664. Issued to Martin Leatherman, May 28, 1940.
- LeClerc, J.A. and Bailey, L.H. Fresh, frozen and dried eggs and egg products. *Cereal Chem.* 17(3): 279-312, May 1940.
- Lewis, A. J. Comparative durability of soybean and other oil varnishes. *Paint, Oil, and Chem. Rev.* 102(9): 9-11, April 25, 1940.
- Lothrop, R.E. Research in the utilization of farm products. In *Peninsula Hort. Soc. Trans.* p. 3-11, 1939.
- Milner, R.T. What the regional laboratory is finding out about soybeans. In the Sixth Natl. Chemurgic Council, Inc., Chicago, Ill., p.1-3, March 27-29, 1940.
- Pohle, W. D. A study of factors influencing the color contributed to soap by gum rosin. *Oil and Soap* 17(5): 100-106, May, 1940.
- Price, D. J. Dust explosions can occur in many plants. In *East. Safety Conf. Proc.*, Newark, N.J., Feb., 1940.
- Recognizing dust explosion hazards in industrial plants. *The Weekly Underwriter* 142(18): 1090-1092, May 4, 1940.
- Reed, I. F. Results of legume coverage studies. *Agr. Engin.* 21(4): 129-130-134, April, 1940.
- Reid, J. D., Nelson, G. H. and Aronovsky, S.I. Determination of cellulose in fibrous agricultural wastes. A rapid method using monoethanolamine. *Indus. and Engin. Chem. - Analyt.* Ed. 12 (5): 255-259, May, 1940.
- Shingler, G.P. and Veitch, F.P. How to Discharge a Turpentine Still. (Rev.) ACE-52, 1940.
- How to Charge a Turpentine Still. (Rev.) ACE-53. 1940.
- Directions for running crude gum on a turpentine fire still. (Rev.) ACE-54. 1940.
- Speh, C.F. 1939-40 annual naval stores report on production, distribution, consumption and stocks of turpentine and rosin of the United States by crop years. *Naval Stores. Rev.* 50(7):18, May 1940.
- Stuart, L.S. and Frey, R.W. Effect of adipose tissue fat on the green-salting of heavy hides. *Jour. of the Amer. Leather Chem. Assoc.* 35(6): 414-418, June, 1940.
- Wilson, R. H. and Deeds, F. The synergistic action of thyroid on fluorine toxicity. *Endocrinology* 26(5): 851-856, May, 1940.

CHANGES IN PERSONNEL

Recent Appointments - Indefinite or Probationary

Dave Roberts	Unskilled Laborer (Gainesville, Fla.)	Carbohydrate Res.
Lester H. Fontaine	Senior Clerk (Wyndmoor, Pa.)	East. Reg. Lab.
Carol M. Jaeger	Jr. Statistician (Peoria, Ill.)	North. Reg. Lab.
Madeline Lee Capbern	Jr. Steno. (New Orleans, La.)	South. Reg. Lab.
Herman J. Morris	Assoc. Chemist (Albany, Cal.)	West. Reg. Lab.

Recent Appointments - Temporary

Elfrieda Egbert	Head Operative (Bookkeeper)	Bus. Admin. (Bkpg)
Paul D. Little	Laborer (Meridian, Miss.)	Carbohydrate Res.
Stella Louise Abel	Junior Clerk Typist	Food Research
George A. Kerr	Tanning Material Technologist (Trevilians, Va.)	Indus. Farm Prod.
Mrs. Nacy Carter McNeill	Jr. Clerk-Typist	" " "
Reuben A. Bergstrom	Assoc. Structural Engineer	Plans and Service
Vespucci V. Petrone	Architect	" " "
Anita R. Floyd	Junior Clerk-Typist	Rural Elect.
Mildred C. Denson	Junior Clerk-Typist	Structures
Bertha A. Heilmann	Junior Clerk-Stenographer	"
Verna W. Walter	Junior Clerk-Typist	"

Separations

Louis M. Gatlin	Laborer (Laurel, Miss.)	Carbohydrate Res.
Katherine Elizabeth Laas	Under Clerk-Typist (Hays, Kans.)	Farm Structures
Alfred G. Roney	Unskilled Laborer (Laurel, Miss.)	" "
Mrs. Rosalie Bee Weiss	Jr. Clerk-Steno. (Stoneville, Miss)	Cotton Gin. Inv.
Harry C. Becker	Under Scien. Helper (Urbana, Ill)	Indus. Farm Prod.
Frank W. Houck	Jr. Laborer (Urbana, Ill.) (Resigned)	" " "
Mrs. Mabel Scanlon	Clerk-Steno. (Resigned)	" " "
Rachel I. Merritt	Jr. Clerk-Typist	" " "
Emery M. Dieffenbach	Assoc. Agr. Engr. (Logan, Wash.) (Trans. to Ent. & Pl. Quar.)	Farm Mech. Equip.
Norman Mare	Asst. Struc. Engr. (Resigned)	Plans and Service
Lou V. Brennan	Jr. Clerk-Typist	Reg. Lab. (Admin)
Melissa Francis Hicks	Jr. Clerk-Typist	" " "
Mary Lindsey	Jr. Clerk-Typist	" " "
Olive Taylor O'Reilly	Jr. Clerk-Stenographer	" " "

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